

HARKEN®

INSTRUCTIONS

GP Catamaran Mainsheet System

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Description and Features

Low profile mainsheet system for high-performance beachcats like the Nacra 17 and F18s.

Features:

- Composite sheaves insert-molded with low friction ceramic bearings
- Hardcoat-anodized aluminum sideplates and ratchet sheave
- Easily converts into 10:1, 11:1, or 12:1 configurations using supplied wrench and becket spacers
- Fairing streamlines air flow and protects the crew and blocks
- Infinitely adjustable cam arm angle
- Ratchet sheave for controlled and smooth release
- Snap shackle for quick attach to boom



Upper block
with fairing



Upper block assembly



Wrench
and becket
spacers



Lower block assembly

System ships reeved with trace line for 12:1 purchase. Mesh carrying case also included.

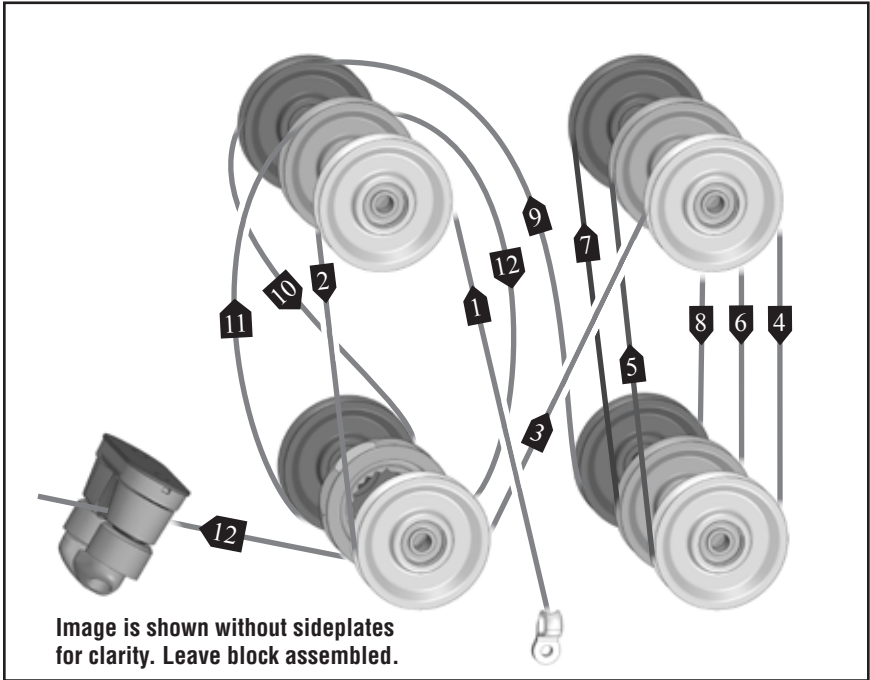
Specifications

Part No.	Sheave Ø		Pin-to-pin length		Weight		Max line* Ø		Maximum working load		Breaking load	
	mm	in	mm	in	g	oz	mm	in	kg	lb	kg	lb
2800	59	2 5/16	224	8 13/16	1039	36.6	8	5/16	545	1200	1636	3600

*Optimal line diameter is 6 mm or 7 mm (1/4" or 9/32").

Reeving 12:1 System

The mainsheet system comes with a trace line reeved as shown below for a 12:1 purchase. Use tape to splice the trace line to the mainsheet, then pull through the system. Use the sequence below if no trace line is in place.



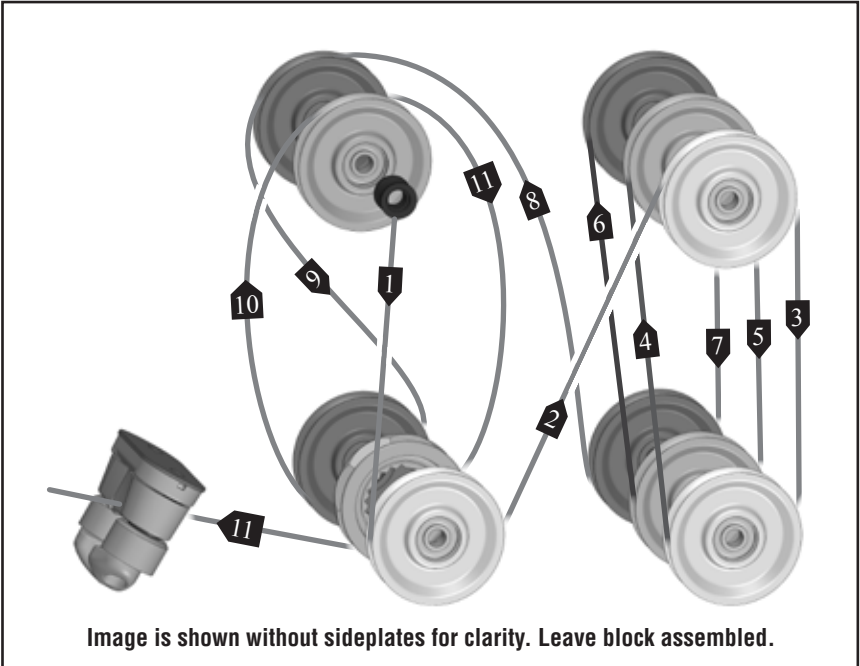
Reeving 11:1 System

To transform the system to an 11:1 purchase remove the shackle and fairing from the upper block. Use 3 mm hex key provided to loosen the screw far enough to remove the sheave. Replace the sheave with one of the supplied becket spacers. Use threadlocking solution to lock the screw for added security. Remove becket on lower block. Remove deadend tang.



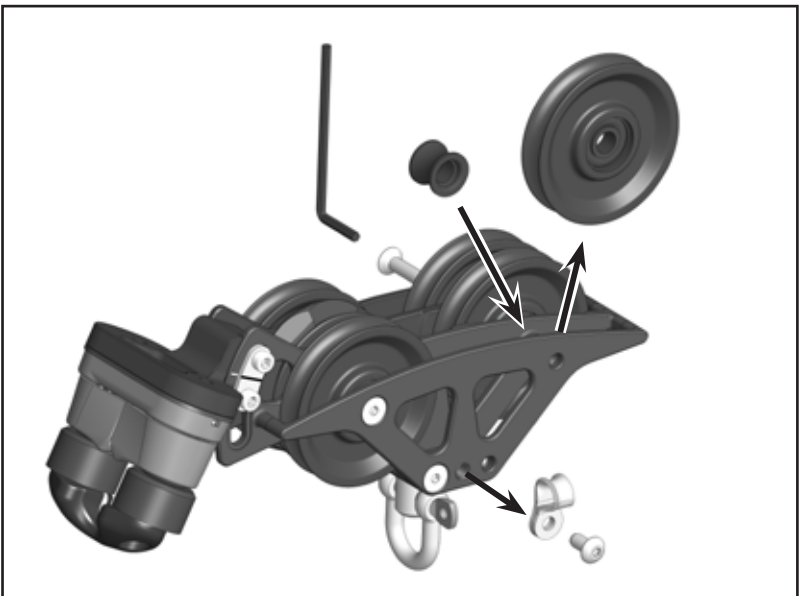
Reeving 11:1 System (continued)

The reeving for the 11:1 purchase is the same as the 12:1 with one leg of the purchase removed.



Reeving 10:1 System

To transform the system to a 10:1 purchase, use 3 mm hex key provided to loosen the screw far enough to remove the sheave per the diagram below. Replace the sheave with one of the supplied bucket spacers. Use threadlocking solution to lock the screw for added security. Remove deadend tang.



Reeving 10:1 System (continued)

The sheave indicated in the diagram below is not used. Remove it to lighten system. Remove the shackle and fairing from the upper block. Use 3 mm hex key provided to loosen the screw far enough to remove the sheave. Replace the sheave with one of the supplied buckets. Use threadlocking solution to lock the screw for added security.



Reeving for the 10:1 purchase uses a deadend on the lower block assembly.

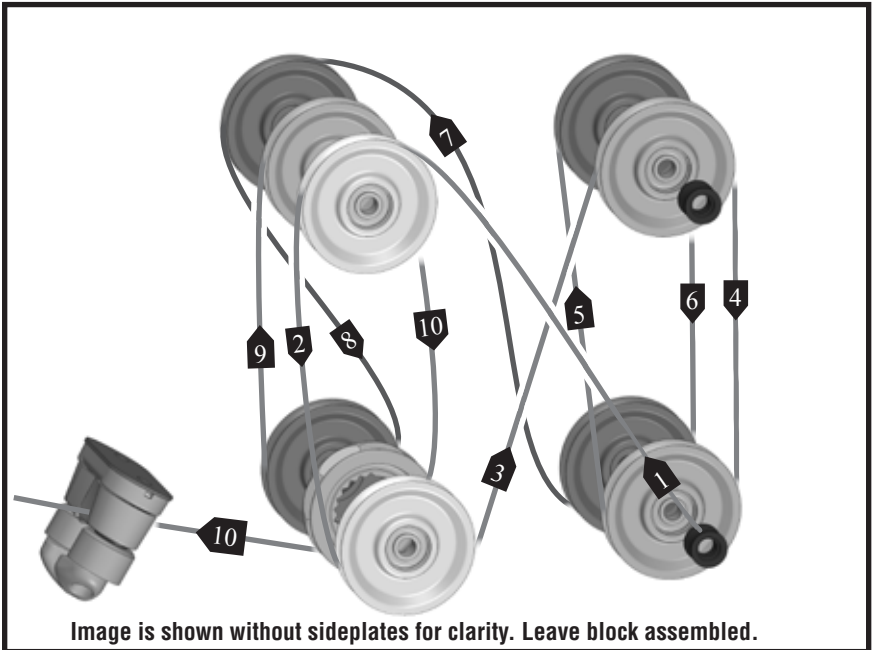
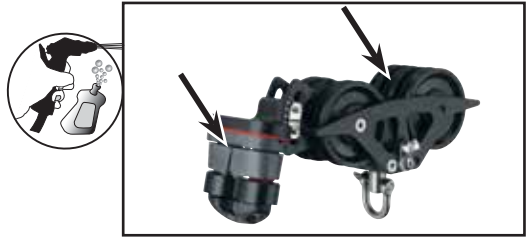
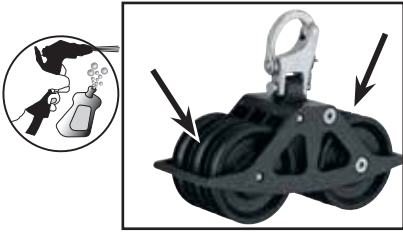


Image is shown without sideplates for clarity. Leave block assembled.

Short-Term Maintenance

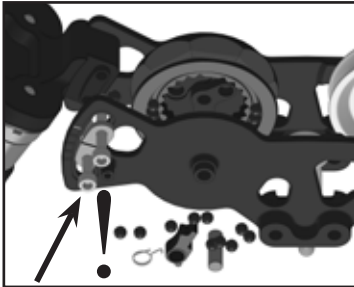
Clean block and attachments frequently with detergent and fresh water applied into sheave and sideplate areas as well as cam cleat pawls. Rotate sheaves and cam pawls to distribute. Flush with fresh water while rotating parts.



Long-Term Maintenance

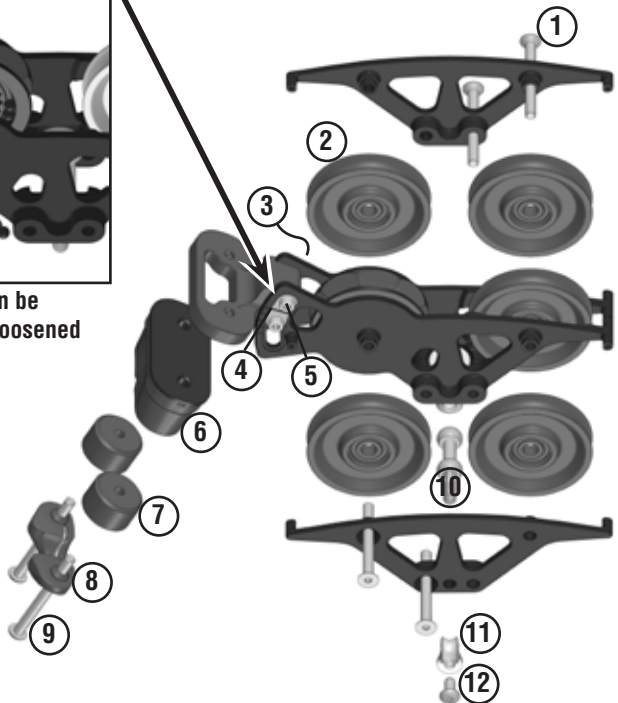
Partially disassemble lower block, carefully following exploded view below. **IMPORTANT! Do not disassemble or loosen the cam adjustment screws. Balls, pawl, springs etc. will fall out. These screws can hold the two center sideplates and ratchet sheave assembly captive as you remove the screws holding the outer assemblies.** If you plan to disassemble the center parts, make sure you have a catch tray and have time for intricate assembly. See appendix for instructions. For basic long-term maintenance, clean ratchet and aft sheave with the sheaves in place. Clean with detergent and fresh water. Rotate sheaves and cam pawls to distribute. Flush with fresh water while rotating parts.

IMPORTANT! Make sure these screws are secured during disassembly.



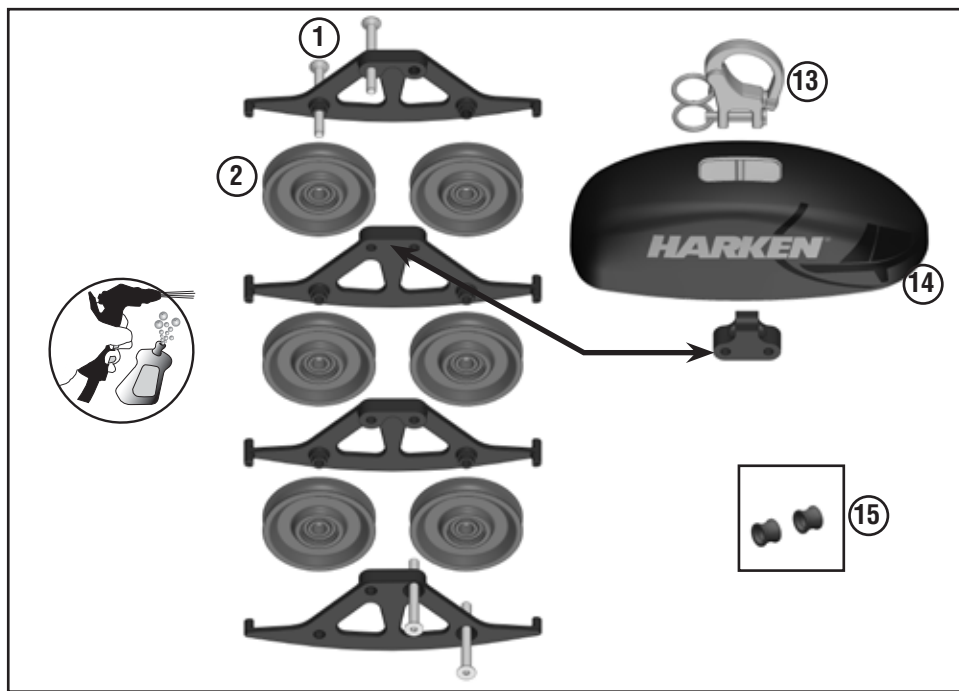
Parts will fall out and can be lost if these screws are loosened during maintenance.

Numbers refer to reorder parts. See next page for part numbers.



Long-Term Maintenance (continued)

Disassemble upper block assembly. Flush with detergent and fresh water.



Replacement parts - upper and lower assemblies

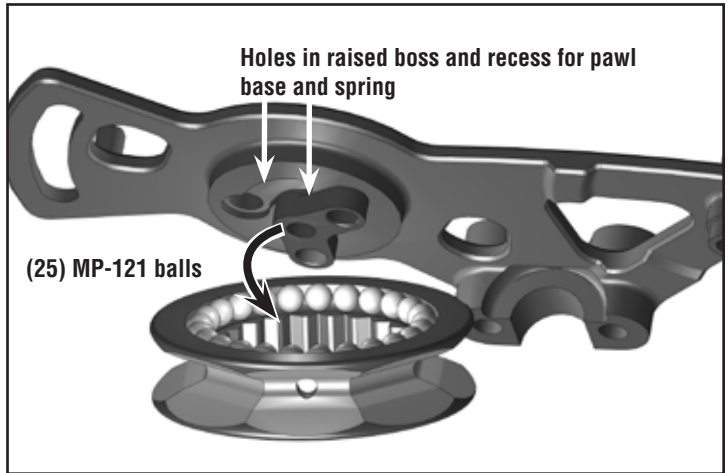
Ref	Part	Description	Quantity
1	HFS1394	Sideplate screws M5X50MM FHCS	8
2	H-76265	Sheave with ceramic bearings	11
3	H-76683	Adjuster arm clamp plate tapped	1
4	H-76682	Adjuster arm clamp plate	1
5	HFS1396	Cam arm adjuster screws M4X30MM SHCS	2
6	150	Cam cleat	1
7	H-59931	Fairlead to cam-cleat spacer	2
8	425B	Flairlead - Black	1
9	HFS1395	Cam cleat screws M5X55MM BHCS	2
10	2108	Shackle - 6MM D	1
11	H-77105	Deadend tang	1
12	HFS1166	Deadend tang screw M5X10MM BHCS	1
13	H-76755	Snap-shackle assembly	1
14	H-76685	Fairing	1
15	H-76629	Becket spacer for deadend (replaces sheave)	2

Appendix - Installing Ratchet Assembly

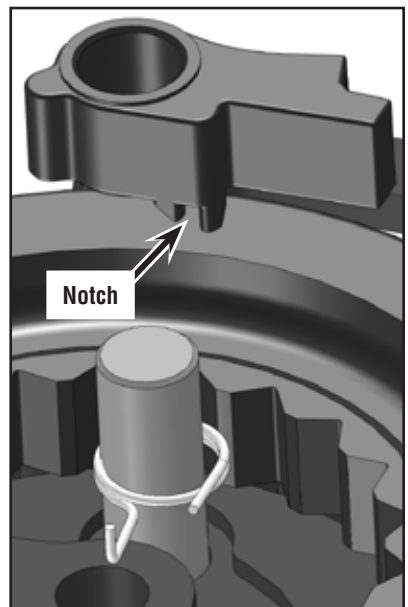
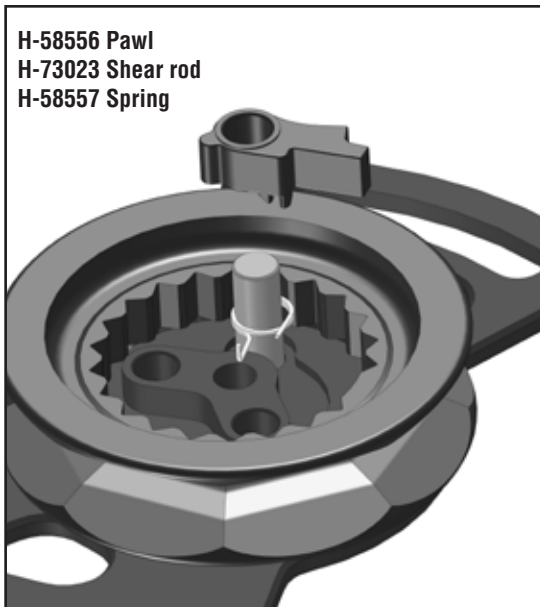
IMPORTANT! If you plan to disassemble, clean, and assemble the center parts make sure you have a catch tray and have time for intricate assembly.

Tools	Small flat-bladed screwdriver	Small wood block spacers
Tweezers	Electrical tape	3 mm hex key (included)

1. Load 25 balls in ratchet sheave. Note: Sheave can be either side up; ratchet teeth are symmetric.
2. Identify the sideplate with three(3) holes in the boomerang-shaped raised boss and with recess for the pawl base. Lower the plate onto the sheave.

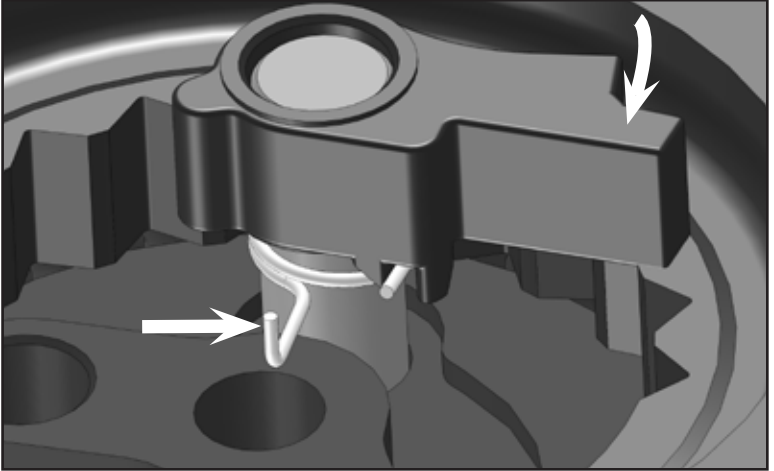


3. Carefully flip the assembly taking care to retain the balls. Load the pawl post and set the spring on the raised boss as shown below. Note notch in pawl shown by arrow and lower onto straight leg of post. See step 4.

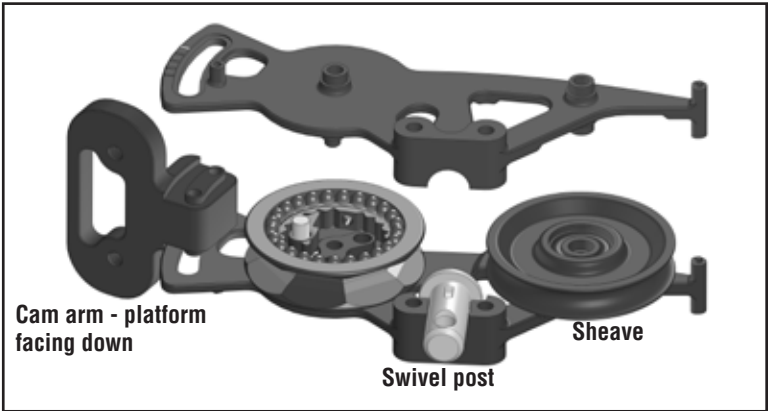


Appendix - Installing Ratchet Assembly (continued)

4. Start to lower the pawl and pick up the straight leg of the spring in the notch. Use your finger to gently press down on the pawl toward the teeth. At the same time, use a small flat-bladed screwdriver to push the bent leg of the spring over the raised boss. Making sure the post is straight up, lower the pawl and spring into place.



5. Load 25 MP-121 balls. Load cam arm so that cleat platform of the cam arm is down. **Tip:** Support plate with 5/8" thick wood block so cam arm can rest. Load sheave either side up. Load headpost.



6. Gently place the other plate on the assembly. Carefully tape sideplates together to secure assembly so you can assemble cam-arm screws and plates. Follow earlier general assembly sequence to finish.

